

TUDOR PLACE TULIP POPLAR
(Tudor Place *Liriodendron tulipifera*)
NPS Witness Tree Protection Program
1644 31st Street, NW
Tudor Place
Southeast corner of south lawn
Washington
District of Columbia

HALS DC-3
DC-3

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN LANDSCAPES SURVEY
National Park Service
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240-0001

HISTORIC AMERICAN LANDSCAPES SURVEY

**TUDOR PLACE TULIP POPLAR
(Tudor Place *Liriodendron tulipifera*)**

HALS No. DC- 3

<u>Location:</u>	Tudor Place, 1644 31st Street, NW, southeast corner of south lawn, Washington, District of Columbia
<u>Owner/Manager:</u>	Tudor Place Foundation, Inc.
<u>Present Use:</u>	Ornamental and shade tree; prominent landscape element
<u>Significance:</u>	The Tudor Place Tulip Poplar (<i>Liriodendron tulipifera</i>) is significant due to its association with the Peter family and their development of the Tudor Place estate. Occupying a prominent place on the south lawn, the large tree is likely amongst the oldest tulip poplars in Washington, D.C., growing since the beginning of the property's long evolution.
<u>Author & Discipline:</u>	Jonathan Pliska, Landscape Architectural Historian, 2007
<u>Project Information:</u>	The Witness Tree Protection Program was a pilot project undertaken by the Historic American Landscapes Survey and the National Capital Region of the National Park Service. The principals involved were Richard O'Connor, Chief, Heritage Documentation Programs; Paul D. Dolinsky, Chief, Historic American Landscapes Survey; Darwina Neal, Chief, Cultural Resources, National Capital Region; Jonathan Pliska, Historian, Historic American Landscapes Survey; Jet Lowe and James Rosenthal, Photographers, Heritage Documentation Programs.

PART I. HISTORICAL INFORMATION

For over 200 years, Tudor Place has enjoyed a prominent place among the elite Georgetown estates of Washington, D.C. The site was originally part of the Rock of Dumbarton in George Beall's Second Addition to Georgetown. Beall's son, Thomas Beall, then sold the property to Francis Lowndes of Montgomery County, Maryland, in 1794.¹ Lowndes was the second son of Christopher Lowndes of Bladensburg, Maryland, one of the wealthiest merchants in the state at the time of the American Revolution. Historical documentation shows that Francis Lowndes erected at least one building on the grounds,² and architectural studies have traditionally

¹ Bill Lebovich, "Tudor Place," addendum to Historic American Buildings Survey (HABS) No. DC-171 (Washington, D.C.: National Park Service, Historic American Buildings Survey, June 1999), 3.

² A friend and contemporary of his, Rosalie E. Calvert, made mention of "Frank Lowndes' country-house in Georgetown." See Rosalie E. Calvert to Henri J. Stier, Riversdale, Maryland, 7 October 1805, *Mistress of*

attributed two small structures, a residence to the west and a stable to the east, to his period of ownership.³ In 1805, Lowndes sold the estate to Thomas Peter, son of the first mayor of Georgetown, and his wife Martha Custis Peter, granddaughter of Martha Washington. Around this time, the new owners commissioned Dr. William Thornton, the first Architect of the Capitol, to design and build a grand residence atop the property's crowning ridge.⁴ Thornton's creation, Tudor Place, was constructed as a five-part late Federal-period mansion comprised of a central block with adjoining hyphens connecting two exterior wings, believed to be the original structures built by Francis Lowndes.⁵ The Peter family remained in residence at Tudor Place until 1983, during which time the estate functioned as a centerpiece of Georgetown society, showcasing the largest public collection of George and Martha Washington artifacts outside Mount Vernon, hosting several of the best-known figures in American history (including Lafayette, George Mason, and Robert E. Lee), and 179 years of the Peter's own rich history.⁶ Armistead Peter III, the last private owner of Tudor Place, established a charitable foundation to preserve the estate as a public institution. Following his death in 1983, the Tudor Place Foundation, Inc. assumed control of the property the following year. Tudor Place was designated a National Historic Landmark in 1960.

The mansion runs east to west across the estate, with grounds extending north and south. Although the size of the property has been reduced to 5.5 acres from the 8.5 acres purchased by Thomas and Martha Peter in 1805, the remaining grounds retain much of the original Federal period design. In particular, Tudor Place is renowned for its boxwood gardens. Martha and Thomas Peter planted the still extant English Boxwood Ellipse (*Buxus sempervirens* 'Suffruticosa') as the focal point for the approach to the main (north) entrance of the house. Martha Peter also planted many of the boxwoods that comprised the original Flower Knot garden. Located immediately north of the Boxwood Ellipse, the Flower Knot was replanted in 1926 in accordance her design. Throughout the nineteenth century, the family utilized the grounds for a variety of functions, including orchards, vegetable gardens, a bowling green, a tennis lawn, a stable, and grazing land for cows and horses, the last taking place on the expansive lawn south of the mansion. Armistead Peter III also completed several major projects during the mid-twentieth century that shaped the present grounds, including the erection of the Japanese Tea House near an arbor known to have been present since the time of the mansion's construction.⁷

Two exceptionally large specimen trees are also planted on the grounds, a white oak (*Quercus alba*) to the northeast and a tulip poplar (*Liriodendron tulipifera*) to the southeast. The tulip poplar in particular has been identified with the estate, and in recent decades has become an

Riversdale: The Plantation Letters of Rosalie Stier Calvert, 1795-1821, ed. Margaret Law Callcott (Baltimore: The Johns Hopkins University Press, 1992): 129-30.

³ Lebovich, 4.

⁴ No evidence exists to fix the precise date of construction, although 1805 is commonly cited since the Peters purchased the property in this year. A downspout on the south façade of Tudor Place is dated 1816, and it is accepted that the mansion was completed sometime during this eleven-year span. See Lebovich, 4.

⁵ Ibid.

⁶ Ibid., 3; Tudor Place Foundation, Inc., *Tudor Place Virtual Tour* (Washington, D.C.: Tudor Place Foundation, Inc., 2002), <http://www.tudorplace.org/tour.html> (accessed 17 December 2007).

⁷ Tudor Place Foundation, Inc.

increasingly iconic element within the overall Tudor Place landscape. Historical documentation on the tree is sparse, and it does not appear at all in the Tudor Place archives until a ca. 1900-10 photograph, which shows that it was already quite large. The earliest written documentation comes from the April 1931 issue of *American Forests*, in which a small blurb states: “the next size is sixteen feet and the tree is found in the garden at Tudor Place, in Georgetown.”⁸ This statement is presumably a reference to the tree’s trunk circumference at that time. Although its precise age cannot be ascertained from these informative but limited sources, given the tree’s known size in the early twentieth century, Jana Shafagoj, Director of Architectural and Landscape Conservation, Tudor Place Historic House and Gardens, believes that it likely dates to the Peter family’s acquisition of the site in 1805, and possibly even earlier.⁹ Given this timeline, the Tudor Place Tulip Poplar has witnessed the growth of the estate from a largely undeveloped property, through nearly two centuries of American garden design under the care of the prominent Peter family, to a place where the public may enjoy a scene of quiet solace and beauty amid the increasingly urban environment of Washington, D.C.¹⁰ In the year 2002, the America the Beautiful Fund designated it as the Millennium Landmark Tree for the District of Columbia, a program designed to recognize one historic tree in each of the fifty states and Washington, D.C., as those most worthy of preservation in the twenty-first century.¹¹ In making this selection, the Fund stated: “The Tulip Poplar at Tudor Place in Georgetown has stood on the grounds of the Peter family estate for six generations. Over the course of more than 200 years it has towered over the development of Georgetown from farms and fields into an urban center in our nation’s capital.”¹²

PART II. BIOLOGICAL INFORMATION

Within the United States, the native range of the tulip poplar (*Liriodendron tulipifera*) is from Massachusetts to Wisconsin, south to Florida and Mississippi. It was first cultivated in 1663¹³ and is one of two species of large, deciduous trees classified under the family Magnoliaceae.¹⁴ *Liriodendron tulipifera* is characterized by its simple, clean-cut, glossy, fiddle-shaped leaves.¹⁵ These leaves emerge in a “flag-like outline,” are alternately arranged on the branches, measure approximately 3” to 8” across and long, respectively. Three or four acute lobes appear on each side near the rounded or truncate base. The petiole, the stem that attaches the leaf to the branch,

⁸ Ovid Butler, ed., *American Forests* 37, no. 4 (April 1931): 216.

⁹ Jana Shafagoj, Director of Architectural and Landscape Conservation, Tudor Place Historic House and Gardens, to Paul Dolinsky, Chief, Historic American Landscapes Survey, electronic mail, 20 June 2007.

¹⁰ Tudor Place Foundation, Inc.

¹¹ Ibid.; America the Beautiful Fund, *Success Stories: Millennium Landmark Trees* (Washington, D.C.: America the Beautiful Fund, 2006), http://www.america-the-beautiful.org/success_stories/millennium_trees.php (accessed 17 December 2007).

¹² America the Beautiful Fund.

¹³ Also known as the tuliptree, tulip magnolia, yellow poplar, and whitewood; Michael A. Dirr, *Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses*, 5th edition (Champaign, Ill.: Stipes Publishing L.L.C., 1998), 572, 574.

¹⁴ Liberty Hyde Bailey and Ethyl Hyde Bailey, “*Liriodendron*,” in *Hortus Third: A Concise Dictionary of Plants Cultivated in the United States and Canada*, revised and expanded by the staff of the Liberty Hyde Bailey Hortorium, Cornell University (New York: Macmillan Publishing Co., Inc., 1976), 669.

¹⁵ G. H. Collingwood and Warren D. Brush, *Knowing Your Trees*, ed. Devereux Butcher (Washington, D.C.: The American Forestry Association, 1964), 259.

is from 2" to 4" long. Leaves are typically green to bright green during the summer and a spectacular yellow or golden yellow in the fall, before falling in October or early November. Perfect flowers measuring 2" to 3" high x 1 ½" to 2 ½" wide bloom from May to early June. These flowers resemble large tulips, and are comprised of six greenish yellow petals in two rows and three relaxed sepals. Each flower's corolla, the inner envelope of floral leaves, contains a distinctive orange color.¹⁶ The large flowers develop into dry cone-like fruits measuring approximately 3" long. These fruits remain in the tree after the leaves drop and disperse winged seeds, which fall and twirl to the ground.¹⁷ In the winter, reddish-brown buds resembling a duck's bill are visible. The blunt terminal buds are particularly conspicuous and measure about ½" long. Lateral buds are similar in appearance but considerably smaller.¹⁸ The grayish brown bark is easily recognizable in a deciduous forest community by its furrowed character and interlaced, rounded ridges that are separated by grayish crevices.¹⁹ When growing in the open, *Liriodendron tulipifera* specimens develop a somewhat pyramidal habit in youth before maturing to an oval-rounded appearance. In dense conditions the tree is often free of branches for 70-80 percent of its total height.²⁰

Liriodendron tulipifera enjoys a fast growth rate, often 15' to 20' over a six to eight year period.²¹ Trees typically reach 80' to 100' in height, with crown spreads from 30' to 50'. The trunk of a particularly large specimen may reach a diameter at breast height (d.b.h.) of 8' to 10'; slightly smaller sizes are significantly more common.²² In 2002, the Tudor Place *Liriodendron tulipifera* was measured at 100' in height with a trunk circumference of 20', giving an approximate d.b.h. of 6'5".²³ This height is therefore at the typical maximum for tulip poplar, and the d.b.h. is also above average. Age at natural death for the species is usually 200 to 250 years, although individual trees may reach 300 years. Trees typically reach reproductive maturity within fifteen to twenty years and may produce seeds for the next 200 years.²⁴ With the belief that the Tudor Place *Liriodendron tulipifera* dates to at least 1805, it has reached the average age range for natural death and is near the maximum age for seed production.

Liriodendron tulipifera is well adapted for use as a shade tree, and is used in residential and commercial lots or as a street tree. However, due to its large size, it requires a 10' to 15' setback and is not typically planted near other trees. The species prefers moist, well-drained, acidic soils composed of clay, sand, or loam. Although it requires full sun, it is only moderately drought

¹⁶ Dirr, 572-73.

¹⁷ Collingwood and Brush, 259.

¹⁸ Ibid.; Dirr, 572.

¹⁹ Dirr, 573.

²⁰ Ibid.

²¹ Ibid.

²² Edward F. Gilman and Dennis G. Watson, *Liriodendron tulipifera: Tuliptree* (Gainesville, Fla.: University of Florida, Institute of Food and Agricultural Sciences, November 1993), <http://edis.ifas.ufl.edu/ST363> (accessed 12 June 2006).

²³ Tudor Place Foundation, Inc.

²⁴ Donald E. Beck, "Yellow Poplar," in *Silvics of North America Volume 2: Hardwoods. Agricultural Handbook 654*, online ed., tech. coords. Russell M. Burns and Barbara H. Honkala (Washington, D.C.: U.S. Dept. of Agriculture, U.S. Forest Service, 1990), 801, 805, 810, http://www.na.fs.fed.us/spfo/pubs/silvics_manual/volume_2/silvics_v2.pdf (accessed 13 June 2006).

tolerant; drought conditions usually cause premature defoliation. *Liriodendron tulipifera* exhibits no tolerance to aerosol salts, but is considered resistant to most pests and diseases. Scales and aphids, particularly tuliptree aphids (*Illinoia liriodendri*), can build up in large numbers and leave behind honeydew, a sticky sugar-containing substance that often fosters the growth of a black, sooty mold. While generally not harmful, the mold is unattractive. Trees are also attacked by several diseases, including cankers, leaf spots, and mildew, causing discoloration and minor dieback but posing little threat to overall health. Verticillium wilt is a somewhat greater problem, as it causes the wilting and death of leaves on affected branches, and any extremely serious, widespread infection may easily kill the tree.²⁵ The Tudor Place Tulip Poplar is presently in good condition, and free from significant pest infestation or disease.

²⁵ Gilman and Watson.